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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/802,994	05/22/2001	Daniel Albert Enns	3060P2303	6239

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EXAMINER
PHAM, BRENDA H

ART UNIT	PAPER NUMBER
2664	

DATE MAILED: 10/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO 90C (Rev 10/03)

		Application No.	Applicant(s)
Office Action Summary		09/802,994	ENNS ET AL.
		Examiner	Art Unit
		Brenda Pham	2664

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 May 2001*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *19-22* is/are allowed.

6)☐ Claim(s) *1,9 and 11-18* is/are rejected.

7)☒ Claim(s) *2-8, 10* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *22 May 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some *   c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1.   Claims 1-22 have been examined.

Claim Rejections - 35 USC § 112

2.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3.   Claim 11, recites the limitation "said communications session" in line 5. There is

insufficient antecedent basis for this limitation in the claim.

Claim 14, line 1-10. There is insufficient antecedent basis for this limitation in the

claim. Should claim 14 depending on claim 11.

Claim Rejections - 35 USC § 102

4.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5.   Claims 1 and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by

SHAFFER et al (US 6,327,364 B1).

Claim 1, **Shaffer et al** disclose a method of network communications,

comprising: classifying a communications session to produce a session classification;

and selectively accelerating said communications session in conformity with said classification. **{Figure 6 shows a network communications is classified into communication session (priority set) based on the criteria shows in (70, 78, 86, 94, 102, 110 and 118). The queue according to the priority set above is selected and accelerating according to selected priority set. Figure 5 shows the step for classifying a communications session of network communication into priority sets and advance (accelerate) communication session base on selected appropriate priority set. Figure 2, Shaffer further teaches the ACD queue manager 12 relies on a fourth set of call advancement priorities to determine that a first call 60 having the highest network bandwidth requirement is advanced to the front of the queue, even though the first call might have been the last received among the first 60, second 62, third 64 and fourth 66 calls. The fourth call is positioned last in the queue 14 even though it has the highest call charge rate because the fourth priority set places a strong emphasis on freeing up network bandwidth (column 6, lines 18-29)}.**

Claim 9 **Shaffer et al** teach the method of claim 1, wherein said acceleration performed by using resource pre-allocated for said communication session. **{Figure 2 shows the bandwidth for priority set of ACD calls is determined and calculated (pre-allocated) before the acceleration is performed according to the selection of an appropriated priority set.}**

Claim Rejections - 35 USC § 103

6.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

7.   Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shaffer

et al (US 6,327,364 B1).

Claim 11, Shaffer et al teach a system comprising a processor (12 of figure 1) for

processing communications and a network coupled to said processor, wherein said

processor classifies communication session to produce a session classification and

selectively accelerates said session in conformity with said session classification.

{Figure 6, shows a network communications is classified into communication

session (priority set) based on the criteria shows in (70, 78, 86, 94, 102, 110 and

118). The queue according to the eighth priority set is selected and accelerated

according to appropriate selected priority set.   Figure 5 shows the steps of

classifying a communications session of network communication into

appropriate priority set and advance (accelerate) communication session base on

priority set}.

Although Shaffer et al does not teach the system above is implemented in a data

packet network. Implement the system and method of Shaffer et al in a data packet

network, such as Internet, is a big advantage because internet is the largest publicly-

accessible data-packet medium available and Internet data communication protocol are

well established and standardized.

Therefore, it would have been obvious to those having ordinary skill in the art at

the time of the invention was made to implement the system and method of Shaffer et al

in any data packet network (e.g., Internet) as long as suitable communication protocols,

of which many are known, are in place.

Allowable Subject Matter

8.   Claims 19-22 are allowed over prior art.

9.   Claims 2-8, 10 are objected to as being dependent upon a rejected base claim,

but would be allowable if rewritten in independent form including all of the limitations of

the base claim and any intervening claims.

10.   Claims 12-18 would be allowable if rewritten to overcome the rejection(s) under

35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the

limitations of the base claim and any intervening claims.

11.   The following is a statement of reasons for the indication of allowable subject

matter: the prior art made of record does not teach or fairly suggest in combination the

step of determining whether or not a threshold number of sessions has been reached

for said session classification; and wherein said acceleration is disabled for said

communications session in response to determining that said threshold number of sessions has been reached as recited in claims 2 and 12.

The prior art made of record fails to teach in combination the method of claim 1, comprising in response to said classifying, determining whether or not said session classification is of a class selected for bypassing said acceleration, and wherein said accelerating is disabled for said communications session in response to determining that said class is selected for bypassing said acceleration as recited in claims 3 and 13.

The prior art fails to teach the method of claim 1, wherein said classifying determine that said communications session is a low priority type of session and further comprising determining whether or not resources are available for accelerating said communications session, wherein said accelerating is performed for said communications session in response to determining said resources are available, and wherein said accelerating may be ceased in response to a request to accelerate to higher-priority session as recited in claim 4.

The prior art made of record further fails to teach in combination the method of claim 1, wherein said communication session is a transmission control protocol (TPC) session, and wherein said acceleration is performed by: locally terminating said TCP session; converting a TCP datum to a proprietary protocol datum for transmission over a satellite communications channel; and reconstructing said TCP datum at a receiving end of said satellite communications channel as recited in claim 6.

Claim 7, the prior art does not teach the method of claim 1, wherein said classifying further determine that said communications session is to be coupled through

a satellite communication channel, and wherein said accelerating is selectively performed in conformity with said determination.

Claim 10, the prior art further fails to teach the method of claim 1, comprising: pre-empting resources from an existing communications session of lower-priority than said communications session and using them for said accelerating; and throttling said existing communications session by using a transmission control protocol (TCP) flow control mechanism.

Claim 14, the prior art made of record does not teach wherein said packet processor determines that said communications session is a low priority type of session and that resource availability is less than a threshold value, and wherein said packet processor does not accelerate said communications session in response to determining that said communications session is a low priority type of session and that said resource availability is less than a threshold value.

The prior art made of record does not teach in combination the system of claim 11, wherein said packet processor classifies said communications session by type of transmission by examining a destination port number, and wherein said packet processor does not accelerate said communications session in response to determining that said communications session is a lower priority type of transmission as recited in claim 15.

The prior art made of record does not teach the system of claim 11, wherein said packet processor processes an transmission control protocol (TPC) session, and wherein said acceleration is performed by locally terminating said TCP session,

converting data to a proprietary for transmission over a satellite communications

channel for subsequent reception and reconstruction of said TCP session by another

packet processor at a receiving station as recited in claim 16.

Claim 17, the prior art made of record does not teach the system of claim 11,

comprising a satellite communication channel and wherein said packet processor

determines that said communications session is to be coupled through said satellite

communication channel, and wherein said packet processor accelerates said

communications session in conformity with said determination.

The prior art further fails to teach the system of claim 11, wherein said packet

processor accelerates said communication session by removing resources used by an

existing communication session and throttles said existing communications session by

using a transmission control protocol (TCP) flow control mechanism.

Claims 19-22, the prior art made of record fails to teach a network device

comprising: a plurality of network ports for connecting network devices; a packet

processor coupled to said plurality of network ports for processing packets

communicated from or to said ports; a memory coupled to said packet processor for

storing data and program instruction for execution by said packet processor; a satellite

communications interface for coupling said packet processor to a satellite

communications channel; and program means executed by said packet processor for

selectively accelerating a communications session between at least one of said plurality

of network ports and said satellite communications interface, wherein said selective

acceleration is performed in response to a classification of said communications sessi
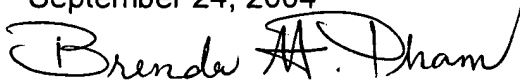
Conclusion

12.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brenda Pham whose telephone number is (571) 272-3135. The examiner can normally be reached on Monday-Friday from 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin, can be reached on (571) 272-3134.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-2600.

Brenda Pham
September 24, 2004